

# Michael William Healy-Kalesh (He/Him/His)

## Postdoctoral Research Assistant in Classical & Recurrent Novae

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<b>EMPLOYMENT</b>	<b>Postdoctoral Research Assistant in Classical &amp; Recurrent Novae</b> LJMU Astrophysics Research Institute, Liverpool, UK	Sep 2021 – Present
<b>EDUCATION</b>	LJMU Astrophysics Research Institute, Liverpool, UK	
	<ul style="list-style-type: none"><li>▪ Doctor of Philosophy in Astrophysics • Thesis: Novae, the Super-Remnant Phenomenon, and the Link to Type Ia Supernovae • Supervisors: Dr. Matthew Darnley, Dr. Christopher Copperwheat, Prof. Philip James</li></ul>	Oct 2017 – Sep 2021
	<ul style="list-style-type: none"><li>▪ Master of Science in Astrophysics • Graduated with Distinction</li></ul>	Sep 2015 – Oct 2016
	University of Liverpool, Liverpool, UK	
	<ul style="list-style-type: none"><li>▪ Master of Mathematics with Honours in Mathematics • Graduated with First Class Honours</li></ul>	Sep 2011 – Jul 2015
<b>JOURNAL PUBLICATIONS</b>	<ul style="list-style-type: none"><li>▪ <b>Healy-Kalesh M. W.</b>, Proceedings of Science, submitted – <i>Association between Recurrent Novae and Nova Super-Remnants</i></li><li>▪ <b>Healy-Kalesh M. W.</b>, Darnley M. J., Shara M. M., Lanzetta K. M., Garland J. T. and Gromoll S., 2024, MNRAS, 529, 236 – <i>Hydrodynamic simulations of the KT Eridani nova super-remnant</i></li><li>▪ Shara M. M., Lanzetta K. M., Garland J. T., Gromoll S., Valls-Gabaud D., Walter F. M., Webb J. K., Kniazev A., Townsend L., Darnley M. J., <b>Healy-Kalesh M. W.</b>, Corral-Santana J. and Schmidtobreick L., 2024, MNRAS, 529, 224 – <i>Introducing the Condor Array Telescope: IV. A possible nova super-remnant surrounding the putative recurrent nova KT Eridani</i></li><li>▪ <b>Healy-Kalesh M. W.</b>, Darnley M. J., Harvey É. J. and Newsam A. M., 2024, MNRAS, 529, L175 – <i>Discovery of a nova super-remnant cavity surrounding RS Ophiuchi</i></li><li>▪ <b>Healy-Kalesh M. W.</b>, Darnley M. J., and Shara M. M., 2024, MNRAS, 528, 3531 – <i>On an apparent dearth of recurrent nova super-remnants in the Local Group</i></li><li>▪ <b>Healy-Kalesh M. W.</b>, and Perley D. A., 2023, RNAAS, 7, 240 – <i>AT 2023prq: A Classical Nova in the Halo of the Andromeda Galaxy</i></li><li>▪ <b>Healy-Kalesh M. W.</b>, Darnley M. J., Harvey É. J., Copperwheat C. M., James P. A., Andersson T., Henze M. and O'Brien T. J., 2023, MNRAS, 521, 3004 – <i>On the observability of recurrent nova super-remnants</i></li><li>▪ <b>Healy M. W.</b>, Darnley M. J., Copperwheat C. M., Filippenko A. V., Henze M., Hestenes J. C., James P. A., Page K. L., Williams S. C. and Zheng W., 2019, MNRAS, 486, 4334 – <i>AT 2017fvz: a nova in the dwarf irregular galaxy NGC 6822</i></li><li>▪ Darnley M. J., Hounsell R., O'Brien T. J., Henze M., Rodríguez-Gil P., Shafter A. W., Shara M. M., Vaytet N. M. H., Bode M. F., Ciardullo R., Davis B. D., Galera-Rosillo R., Harman D. J., Harvey É. J., <b>Healy M. W.</b>, Ness J.-U., Ribeiro V. A. R. M. and Williams S. C., 2019, Nature, 565, 460 – <i>A recurrent nova super-remnant in the Andromeda galaxy</i></li></ul>	
<b>CONFERENCES &amp; TALKS</b>	<ul style="list-style-type: none"><li>▪ Invited General Talk, The Golden Age of CVs and Related Objects VI, Palermo, Italy</li><li>▪ Contributed Talk, National Astronomy Meeting 2023, Cardiff University, UK</li><li>▪ Contributed Talk, European Astronomical Society Annual Meeting 2022, Valencia, Spain</li><li>▪ Invited Seminar Talk, University College London MSSL, UK (Virtual)</li><li>▪ Contributed Talk, National Astronomy Meeting 2021, University of Bath, UK (Virtual)</li><li>▪ Contributed Talk, National Astronomy Meeting 2019, University of Lancaster, UK</li><li>▪ Research Summary Talk, UK Nova Group Meeting 2019, Jodrell Bank Observatory, UK</li><li>▪ Invited Talk, The First ARI MSc Workshop, Liverpool, UK</li></ul>	Sep 2023 Jul 2023 Jun 2022 Oct 2021 Jul 2021 Jul 2019 Apr 2019 Nov 2017

<b>PROFESSIONAL ACTIVITIES</b>	<i>Reviewing Responsibilities</i>	
	<ul style="list-style-type: none"> <li>▪ Reviewer for The Astrophysical Journal</li> <li>▪ Reviewer for Monthly Notices of the Royal Astronomical Society</li> <li>▪ Internal panel member for the Liverpool Telescope Time Allocation Group</li> </ul>	Aug 2023 – Mar 2023 – Apr 2022 –
	<i>Departmental Responsibilities</i>	
	<ul style="list-style-type: none"> <li>▪ PDRA representative at Equality, Diversity &amp; Inclusion meetings</li> <li>▪ PDRA representative at Departmental Management Board meetings</li> </ul>	Apr 2022 – Apr 2022 –
<b>TEACHING EXPERIENCE</b>	<ul style="list-style-type: none"> <li>▪ Lecturer in PHYS453: Time Domain Astrophysics</li> <li>▪ Tutor in PHYS207: Mathematics for Physicists III</li> <li>▪ Postgraduate Teaching Assistant in PHYS394: Practical Astrophysics II</li> <li>▪ Postgraduate Teaching Assistant in PHYS216: Practical Astrophysics</li> <li>▪ Postgraduate Teaching Assistant in PHYS155: Working with Astrophysics</li> </ul>	May 2023 Oct 2021 – Dec 2021 Oct 2019 – Dec 2019 Nov 2018 – Mar 2019 Feb 2018 – Mar 2018
<b>AWARDS &amp; SCHOLARSHIPS</b>	<ul style="list-style-type: none"> <li>▪ Adult MHFA Half Day Certificate of Attendance, MHFA England Course provided an introduction to mental health and the factors that can affect people’s wellbeing</li> <li>▪ Science and Technology Facilities Council PhD Studentship Funding for postgraduate research</li> <li>▪ Liverpool John Moores University Faculty of Engineering and Technology Studentship Funding for postgraduate research</li> <li>▪ JG Oldroyd Prize, University of Liverpool For special merits in the examinations in Applied Mathematics and Theoretical Physics</li> </ul>	Dec 2018 2017 – 2021 2017 – 2021 Jul 2015
<b>OBSERVING TIME</b>	<ul style="list-style-type: none"> <li>▪ Awarded 96 hours with Liverpool Telescope as Principal Investigator</li> <li>▪ Awarded 7 hours with Faulkes Telescope South as Principal Investigator</li> <li>▪ Awarded 6 ks with <i>Swift</i> as Principal Investigator</li> <li>▪ Awarded 17 orbits with <i>Hubble Space Telescope</i> as Co-Investigator</li> </ul>	
<b>PROFESSIONAL AFFILIATIONS</b>	<ul style="list-style-type: none"> <li>▪ Member of the European Astronomical Society</li> <li>▪ Honorary Recognised Teacher of the University of Liverpool</li> <li>▪ Junior Member of the International Astronomical Union</li> <li>▪ Associate Fellow of The Higher Education Academy</li> <li>▪ Honorary Lecturer of the University of Liverpool</li> <li>▪ Fellow of The Royal Astronomical Society</li> </ul>	2024 – Present 2022 – Present 2022 – Present 2018 – Present 2018 – 2021 2017 – Present
<b>OUTREACH</b>	<ul style="list-style-type: none"> <li>▪ Research Project Supervisor, Astrophysics Research Institute Work Experience Week</li> <li>▪ Invited Guest Talk, My Online Schooling (Virtual)</li> </ul>	Jul 2023 Nov 2021
<b>SKILLS</b>	$\LaTeX$ , Python, PyRAF, Fortran (Novice), HTML (Novice), Starlink packages, Microsoft Office	
<b>ACADEMIC REFEREES</b>	<ul style="list-style-type: none"> <li>▪ <b>Prof. Matthew Darnley</b>            Professor of Time Domain Astrophysics            Associate Dean for Education – Faculty of Engineering Technology            Head of Astrophysics Teaching – Astrophysics Research Institute            LJMU Astrophysics Research Institute            146 Brownlow Hill, Liverpool, L3 5RF, UK            Email: M.J.Darnley@ljmu.ac.uk</li> <li>▪ <b>Prof. Michael Shara</b>            Curator, Department of Astrophysics, American Museum of Natural History            Adjunct Professor of Astrophysics at Columbia University            Honorary Professor, Chemistry at Queen’s University Belfast            American Museum of Natural History/Astrophysics            Central Park West at 79th Street, New York, NY 10024, USA            Email: mshara@amnh.org</li> </ul>	